Working with OGC WFS Services

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Open Geospatial Consortium (OGC)

- International industry consortium
- Develop publicly available interface standards
- www.opengeospatial.org
Web Feature Services (WFS)

- Serving data as vector features
- Uses GML
- WFS specification
Web Feature Services (WFS)

Two encodings:
- XML (HTTP POST or SOAP)
- Key/value pairs (HTTP GET)

POST

```
<GetCapabilities
 xmlns="http://www.opengis.net/wfs/2.0"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="http://www.opengis.net/wfs/2.0 http://schemas.opengis.net/wfs/2.0/wfs.xsd"
 service="WFS"
 version="2.0.0"
/>
```

GET

http://sampleserver6.arcgisonline.com/arcgis/services/SampleWorldCities/MapServer/WFSServer?request=GetCapabilities&service=WFS&version=2.0.0
Web Feature Services (WFS)

- GetCapabilities
- DescribeFeatureType
- GetFeature
Web Feature Services (WFS)

- GetCapabilities
- DescribeFeatureType
- GetFeature

- WFS-T
  - Editing:
    - Create
    - Delete
    - Update
Web Feature Services (WFS)

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- Versions supported:
  - 1.0.0
  - 1.1.0
  - 2.0.0
WFS vs. other service types

WMS
WFS vs. other service types

WMS

Esri Feature Service
WFS vs. other service types

WMS

Esri Feature Service

Why use a WFS service?
Create a WFS service

• Create from a map (WFS Map Service)
• Create from a hosted feature layer (hosted WFS Map Service)
• Create from an enterprise geodatabase (WFS Geodata Service)
  - This is being deprecated
WFS clients

- Data Interoperability Extension in ArcMap
- ArcGIS Online/Portal Map Viewer
- *NEW* ArcGIS Pro
WFS in ArcGIS

Creating a service
Consuming a service
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